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ABSTRACT

This guide discusses how a computer can motivate students, how it can be used as a support for the writing process, and how it can help teachers reinforce good writing habits. The guide includes sections on managing the classroom computer; student scheduling; human resources; introducing the computer; learning editor commands; managing student text files; and the writing process, which includes pre-writing, writing, response, revision, evaluation, and recognition. An appendix of letters from children to computer pen pals is attached. (MS)

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Interactive Technology Laboratory

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A Classroom Word Processing Guide

Writing using a microcomputer can be motivating for authors of all ages. Even very young children are able to create their favorite letters and words long before they are capable of forming the letters themselves. Adults who "can't type" find that using a computer-supported writing system enables them to compose, edit and print text more easily, even in their own homes. Over the past three years a specially adapted word processing system for children (The Writer's Assistant) has been used by several classroom teachers as an integral component of the writing instruction for children in grades 4-6.

The computer is a powerful tool when used as a support for the writing process. However, computers are in no way a replacement for good teaching. Computers are not very good at judging the quality of writing nor do they adequately interpret the human emotions evident in an author's work. No computer is yet able to identify a good joke when it sees one.

However, an easy-to-use word processing system can help busy teachers reinforce good writing habits. As a writing tool, the computer can offer students greater freedom to express their ideas and experiences by facilitating the composition, editing and printing of their stories, letters and other compositions.

Managing Your Classroom Computer

If you have access to a computer for your classroom, you may be concerned about how to give equal access to all your students. To use one computer most efficiently, you will need to set up a systematic management system which effectively utilizes the computer time available. What can a teacher do with one computer and thirty students? How can each student have an opportunity to use the computer? How can students become independent computer users who do not constantly seek help from the teacher? How can teachers introduce computer activities for their classes when they are just learning about computers themselves? Don't panic, it is not that difficult. First, let's get organized. And remember, don't be afraid to learn along with your students.

Student Scheduling. Since computer technology is likely to affect everyone's work in the future, it is important for teachers to insure that girls and boys of all achievement levels be included. Whether you choose to incorporate the computer into your classroom as a daily activity or as a more informal interest center, scheduling is important.

Recent studies on computer-supported writing indicate that two students collaborating at the keyboard produce better quality text, at least initially, than individuals working alone. Pairs of students have been found to interrupt the classroom less frequently than students working alone. Each pair of students was scheduled for 25-30 minute periods throughout the school day, thus allowing each about 2 sessions per week. You might wish to organize

a schedule completely within the reading and language arts periods but the amount of user time per week will be significantly reduced.

If you already utilize learning centers in your teaching, a "computer center" will serve as a natural extension of the existing classroom structure. Wall charts listing important computer commands can be positioned around the computer as a reference for students while they are writing. Commercial or teacher-made task cards which describe specific writing tasks can be used to provide activity instructions to users. A few companies are beginning to develop software which provides on-screen writing activities for budding authors. Some can even be used with a word processor for later editing and printing of compositions.

Human Resources

Teachers working with a word processor for the first time generally find it helpful to organize a whole-class demonstration of computer operation and the basic word processor features. A few students might be selected for additional training before or after school to serve as helpers for the remainder of the class. This seems to work especially well when older students in multi-graded classrooms serve as tutors.

Other resources may exist right in your classroom, school or local community. Almost every school has at least one "local expert" student who has a computer at home. Try to arrange for one or more of these students to work with your class from time to time until

your students are experienced enough to work on their own. If you are one of those teachers who feels uncomfortable using the computer yourself, these cross-age tutors can be especially helpful.

To make the community aware of the school's computer activities, organize a "Computer Night" to demonstrate plans for using the computer as a writing tool. Such events have motivated parents and other community members to support classroom computer use throughout the year. Teacher Education Programs are now requiring classroom computer experience for their credential candidates. Teachers using computers may be able to receive some in-class help managing computer activities by contacting local colleges.

Introducing the Computer

Learning The Keyboard. Students first need to become familiar with the computer keyboard. Although the key layout is similar to that of a typewriter, there are some differences. One effective way of introducing the keyboard is through commercially produced software such as the Typing Tutor (MECC), Master Type (Lightning Software) and Apple Presents Apple (Apple Corporation). These programs help students of all ages develop keyboard familiarity and computer operation skills. For younger students, programs like Hodge Podge, Sticky Bear and Juggles' Rainbow are useful.

A giant-sized keyboard display can be made by writing each letter and symbol on a styrofoam hamburger carton and arranging them

on a bulletin board in a configuration matching the computer keyboard. Constructed early in the year, this display becomes a ready reference for children first learning the symbol positions.

Access to one or more old typewriters can greatly increase the amount of classroom keyboard experience available to children. Some teachers have found it helpful to set up a "typing center" for the entire year. Activities might include typing spelling lists and vocabulary words, writing letters and messages to other students and even working on lessons involving home-key placement. Remember, students do not have to be a proficient typists to use a computer effectively. However, the more familiar students are with the key positions, the better use each will make of the limited computer time available.

Learning Editor Commands. Most word processors have a dozen or more commands to learn. However, a novice needs to know only few to get started. Once the basic commands to insert, drop and save text have been explored, students can begin writing right away. As they gain experience, additional commands can be introduced which increase the flexibility and power of the system. Elementary students can work effectively for a whole year using only 4 or 5 commands. It is helpful to make a large wall chart of the commonly used commands to display near the computer as a reminder.

One effective way to help students quickly learn the basic word processor commands is for the teacher to first enter a paragraph containing errors, or asking for information from the user. Students

can then correct the errors or answer the questions by entering their own text. Students also enjoy adding their own introductions and conclusions to teacher prepared "story starters" and "story endings" and are fun to read in class as well.

Teacher prepared files such as these can be used as initial directed activities to provide structured practice in the use of the basic editor commands. We have found it to be more efficient for students to initially practice editing previously entered text rather than first entering their own. As students gain confidence, they begin to compose original stories and letters for later editing and printing.

Managing Student Text Files

Most word processors store student compositions on a "text disk." Without careful management, students (and teachers) may lose track of a particular text file or may create a file with the same name as some other person's file thereby risking unwanted erasure. To avoid these problems, students can be divided into groups and assigned to a particular text disk labeled with a number or a colored sticker. Usually, four or five elementary students can be assigned to a disk without filling it too quickly. Older students may require their own disk. It is helpful to display a list of students using each text disk to make it easier to find the correct disk when they write or edit previous drafts of a story. When a disk becomes filled, a new one can be made up or the old files can be printed and removed.

The Computer and the Writing Process

Authorities on children's writing (Cooper, 1978; Graves, 1978; Moffit, 1976) remind us that effective instructional programs treat writing as a process, not an isolated exercise. With teacher guidance, students advance through stages to produce a complete composition. Students should be encouraged to write for different purposes (eg., descriptive, narrative, expository, poetry) about issues important to them and for audiences they care about. Computer supported word processing systems can have direct application in several of the following six stages of the writing process:

Stages of the Writing Process

1. Pre-writing
2. Writing
3. Response
4. Revision
5. Evaluation
6. Recognition

Pre-writing. Prior to composing on paper or on the computer, the students should meet as a whole group and brainstorm ideas for a particular topic. This discussion might identify appropriate descriptive words or explore how to organize the writing task. Some writing activities are appropriate for composing at the keyboard (eg., short messages, answers to peer questions or opinions on an

issue), while others should be more carefully outlined prior to entering the text (eg., a story or article for a school newspaper).

Students facing a blank sheet of paper or screen may need additional assistance in generating ideas to write about. Commercial or teacher constructed task cards which ask probing questions or give interesting topics to write about are often helpful. A variety of interactive writing software is now available to help prompt writing. These programs give help to the students by prompting them to complete texts or by providing additional structured support. (For example, the Interactive Writing Tools, InterLearn Inc, and the Quill system, D.C. Heath.)

Writing. After the pre-writing activities, students compose the first draft of their text. It should be emphasized that this process is mainly putting ideas on the screen (or on paper) and should not be seen as the final product. We have found that students are more motivated during this stage of writing using a computer than paper and pen. Either alone or in pairs, students write pieces of text and save them on disks. After finishing their lessons, students can make 2 printed copies if a printer is available -- one for the teacher and one for the student.

Response. The next stage in the writing process is for peers to react to each other's writing. In the past, this step has been reserved for the teacher, reducing the author's audience and the range of possible reactions. It is usually convenient to give

feedback to authors during whole-class response sessions or in small groups. The teacher, or another good reader, can read each composition out loud, students then make suggestions about each and the authors makes notes on their own printed copy for editing later.

Response can include comments on the ideas presented as well as grammar, punctuation and spelling changes which the writer should consider. Students should focus on only one aspect at a time during these sessions. For example, response groups might meet 3 times before the author makes final revisions. The first time the group might respond only to the ideas in the written piece. During the second session, text could be examined for proper use of grammar, spelling, capitalization and punctuation. For the final session, dates, quotes and format might be reviewed.

Revision. Just as professional authors edit their work prior to publication, so too should novice writers. Editing with pencil and paper can cause groans and moans in most writing classes. However, by utilizing the unique capabilities of the word processor, students are more excited about the editing process and take greater care in their writing. Students introduce fewer new errors while making corrections using the computer and the final product looks so nice that we find students are more likely to share their work at school and at home.

The natural time to revise text is after response groups have met and analyzed the individual texts. In the classroom, there is often not enough time for everyone to review their text for

possible changes directly on the computer. Planned revisions should be marked on the printed drafts. Writers can then use the computer to quickly make the necessary changes in the text files using the printed copy as a reference. The final draft can be saved on their text disk and printed.

Evaluation. For most school writing, students write and teachers correct. The writing process described here encourages more input from peers and other adults such as aides and parents. Have students take their writing home to share it with their parents. It is an excellent way for families to become involved in school projects and may serve as yet another motivation for the student writing.

There are various forms of writing evaluation. The procedures depend on the purpose of the evaluation and the evaluator's skills. For example, objective tests on language mechanics are more valuable indicators of students' editing skills than composing abilities. Teachers might collect samples of student writing and score them using one of various available methods (analytic scoring, holistic scoring or primary trait scoring). Teachers often find it useful to simply collect writing samples at the beginning and the end of the year to document improvement over time.

It is important to keep in mind that the evaluation phase of the writing process needs to support and encourage student writing. Students generally find it helpful to evaluate their own work and

that of their peers. It is important for students to understand the audience and purpose of each writing assignment, the type of evaluation, and the need to have "clear" reasons for their comments.

Recognition. In this often overlooked stage of the writing process, writing is shared with others. Presentation can take the form of class books, school newspapers and work displayed on class or district bulletin boards, in community markets or public buildings.

Teachers with access to a modem and communication software are able to open a much wider audience to their student writers. By linking together computers in different places over telephone lines, students can share their ideas and writing outside the four walls of their classroom. This capability, previously available only to large institutions, now enables students to communicate over inexpensive computer networks like the Source or Compuserve with students across town or around the world.

Several classrooms in Vista and Oceanside, California have been exchanging letters regularly with their "computer pals" at schools in Sitka and Wainwright, Alaska. These classrooms have also been participating in a "computerized newspaper" network (The Computer Chronicles Newswire, InterLearn Inc). Students write articles on the computer and exchange disks with other participating schools. Each school produces its own local edition of the Computer Chronicles Newspaper which include stories written locally and by other students around the country.

Word processing can be an effective support for classroom writing instruction. In addition, writing on the computer provides an alternative path of entry into the use of this exciting new technology for children and their teachers.

References

1. Cooper, C. and L. Odell (editors) Research on Composing: Points of Departure. Urbana, Ill.: National Council of Teachers of English, 1978.

2. Graves, D. Balance the Basics: Let Them Write. New York: Ford Foundation, 1978.

3. Moffit, J. and B.J. Wagner. Student-Centered Language Arts and Reading, K-13: A Handbook for Teachers. Boston: Houghton Mifflin Co., 1976.

4. Quill: Microcomputer-Based Writing Activities. D.C. Heath and Co., 125 Spring Street, Lexington, MA. 02173.

5. The Writer's Assistant: A Word Processing System for Children and Adults. InterLearn, Inc, P.O. Box 342, Cardiff, CA 92007.

APPENDIX

The following letters and articles were written on computer by grade 5-8 children in Alaska and California and were exchanged over the Source Network using a modem attached to Apple II computers and the Network Tool communications software (InterLearn Inc).

Dear Computer Pal,

My teacher said we could write computer letters. I thought it was neat. I am in the seventh grade and have never been away from the north slope of Alaska. We go to fish camp every year and whale hunting in the Spring. I love to hunt and fish. Do you like to go hunting? Write soon.

Your Friend,
Alfred
Wainwright, Alaska

Dear Computer Pal,

I am in the 5th grade here in Wainwright. It is very cold outside today. Our temperature is 14 degrees below zero. What is it like in your town? The sun went down on November 18 and will not be back until January 24. It is like night all day long. Today our janitor shot a rabid white fox on our back steps. I'm glad we were not out at resess.

We like to eat muktuk and frozen fish. We also like warmed caribou blood to drink. Muktuk is whale skin. To us it tastes good. We had a feast at the high school on Thanksgiving. We had duck soup, caribou soup, frozen fish and muktuk. What did you eat?

Well I don't have anything else to say. Write to me on this computer. My teacher, Mr. Vancil, says he will help me read your letter.

Good-by,
Fritz
Wainwright, Alaska

Cutting Ice

At about the middle of October, everyone goes out of town one mile to the ice pond to cut ice. To cut the ice you have to take a big saw and cut the ice. After you have about 5-6 pieces, you load them onto your sled, take them home and put them in your ice cellar for summer. An ice cellar is like an underground shack. Here in Wainwright there is a permafrost in the dirt so the ice cellar keeps

the ice frozen all summer.

Ward
Alak High School
Wainwright, Alaska

Dear Charlene,

My name is Armando and I'm 11 years old. I am in the fifth grade and am a boy. Tell me how the sun rose. I'm part Mexican and part American. What are you? Do you ever think Sitka will sink? Does it feel nice living on an island? Do you have a pet? Do you have a brother or sister? What school do you go to? What grade are you in? What is your teacher's name? How old are you? Do you have lots of friends? Do you do lots of work? Have you seen the movie E.T.? Do you like being a pen pal with a boy? Where were you born? Do you like books? Please write to me soon.

Your Friend,
Armando
Olive School,
Vista, California

Weather

The weather here in Oceanside has been extremely warm and sunny!!!!! In the morning it is usually cold and foggy but it wears off in the afternoon. It has been sunny and fair with clouds. Mostly nice to swim and go to the park. You can't dress heavy.

Joanne and Jeff
Garrison School,
Oceanside, California